UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MEMORANDUM JUN 0 5 2007 REPLY TO THE ATTENTION OF:

SUBJECT: **ENFORCEMENT ACTION MEMORANDUM** -Determination of Threat to Public Health or Welfare at the Former Hough Place Station Site, Chicago, Illinois (Site ID# B5HH)

FROM: Thomas Cook, On-Scene Coordinator
Emergency Response Branch - Section #2

TO: Richard C. Karl, Director
Superfund Division

THRU: Linda M. Nachowicz, Chief
Emergency Response Branch

ATTN: Michael Harris, Section Chief
Emergency Response Branch, Section #2

I. PURPOSE

The purpose of this memorandum is to document the determination of an imminent and substantial threat to public health and the environment at the Former Hough Place Station Site in Chicago, Illinois. The proposed removal action is necessary to mitigate the immediate threat to public health and the environment posed by the presence of uncontrolled hazardous wastes on site, including soils containing benzene, ethylbenzene, tolune, and xylenes (BTEX), polynuclear hydrocarbons (PAHs), and lead.

The response action proposed herein will mitigate Site conditions by removal and off-site disposal of the contaminated soil. The high levels of BETX, PAHs and lead in surface and sub-surface soil at concentrations that exceed the Illinois Environmental Protection Agency (IEPA) Tiered Approach to Corrective Action Objectives (TACAO) are considered hazardous, Additional activities will include the implementation of an air monitoring plan, water management, and Site contingency plan. This removal is considered to be time-critical. The project will require an estimated 12 months to complete. It is anticipated that this removal will be completed by the PRP pursuant an Administrative Order of Consent (AOC)

There are no nationally significant or precedent setting issues associated with the Former Hough Place Station Site. The Former Hough Place Station Site is not on the National Priorities List (NPL).

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID # ILN0005010190

A. Physical Location and Description

The Former Hough Place Station Site is located in Cook County, Chicago, Illinois. The geographic coordinates of the site are 41° 40' 45" north latitude and 86° 27' 19" west longitude. The Site is located at 2500 South Corbett in Chicago, Illinois and is approximately 5.6 acres. The Site is bounded to the north by the South Branch of the Chicago River (the River), to the west by the remainder of 2500 South Corbett Corporation/Crowley's Yacht Yard (Crowley's), to the south by the Chicago and Alton Railroad, and to the east by a property owned by Center Point Properties.

In Illinois, the low-income percentage is 27% and the minority percentage is 32%. To meet the EJ concern criteria, the area within 1 mile of the Site must have a population that's twice the state low-income percentage and/or twice the state minority percentage. That is, the area must be at least 54% low-income and/or 64% minority. At this Site, the low-income percentage is 49% and the minority is 74% as determined by Arcview or Landview III EJ analysis (Attachment 2). Therefore, this Site does meet the Region's EJ criteria based on demographics as identified in "Region 5 Interim Guidelines for Identifying and Addressing a Potential EJ Case, June 1998".

B. Site Background

The Site was developed initially in 1886 as a manufactured gas plant (MGP) Site by the Equitable Gas Light and Fuel Company. The MGP Site formerly contained three gas holders: a 50,000 cubic foot (cf) gas holder with scrubbers; a 5,000 cf gas holder; and a high pressure "Pintsch" gas holder. Other former MGP features include retort areas, underground and aboveground oil tanks, tar wells and vacant buildings. From approximately 1892 through at least the 1920's, the MGP produced "Pintsch" gas, a high-quality, high-pressure gas. Peoples Gas acquired the Site in 1897 and dismantled the former MGP structures in 1934. From the 1930's through at least 1950 portions of the Site were leased to Illinois Asphalt Company as well as other companies and were used for various operations including asphalt mixing, concrete batching and other material management activities, and prior to 1939 a portion of the Site was leased to Material Services Corporation for storing building materials. Peoples Gas sold the Site in 1953. JM Corbett asphalt mixing occupied the Site from approximately 1953 to 1978. Since approximately 1978 the Site has been owned and operated by Crowley's for boat storage, sales and repair. The owner relocated the boating operation in September 2005, and the Site is now mostly vacant. Several underground storage tanks (USTs) were discovered on the Site in 2006. In addition, two former boat slips, the Evans Slip and the Hough Slip,

were located within the west Site boundary and to the east of the Site, respectively. Based on Sanborn Maps, the Hough Slip appears to have been filled in between 1950 and 1975, while the Evans Slip was filled in between 1911 and 1950.

Several investigations at the Site have been conducted for Peoples Gas in recent years. A site investigation (SI) performed in 2000 included completion of test pits and soil borings and installation of shallow monitoring wells. Impacts were observed at various locations on the Site at depths below the water level. Soil samples were collected in June 2001 as part of a supplemental site investigation. In Several areas tar was present at depths below the water table. In September and October of 2006, a geotechnical investigation was conducted in order to design excavations necessary to remediate the Site. Soil borings advanced beyond the eastern Site boundary (in the location of the former Hough Slip) indicated that tar was present at depths below the water level in the filled-in slip. Remediation of the Site began at the Site under the Illinois Site Remediation Program. This effort involved excavation of impacted material to depths of up to 24 feet and off-site disposal of the excavated materials. Remediation of the Site by excavation and off-site disposal of impacted materials that was being conducted under the Illinois Site Remediation Program will continue under an administrative order on consent that will implement this action memorandum.

C. Site Sampling and investigations

Four SIs were conducted at the Site. In 1991, Hanson Engineers Inc. conducted a preliminary SI which did not include intrusive activities. In 2001, Burns & McDonnell Engineering Company, Inc. conducted additional SI activities. Activities included advancing soil probes, soil borings and collecting and analyzing soil samples. In 2006 Burns & McDonnell conducted additional SI activities including advancing soil borings and collecting soil samples for chemical analyses and geotechnical testing. During SI field activities, soil impacts were observed to varying degrees in samples obtained from the Site. As used herein, source material is soil that contains chemical constituents at levels that exceed criteria set forth in TACAO, 35 IAC, Parts 742.124, 742.215, 742.220 or which contain tar, tarry residues or related sheen, identified by visual inspection and/or laboratory analyses. As such, source material was identified in five areas of the Site as well as in the former Hough and Evans slip areas located immediately adjacent to the east and within the west Site boundaries respectively. Certain constituents in the soil and groundwater; primarily BTEX, PAHs, and lead exceeded TACAO Tier 1 soil ingestion at the Former Hough Place Station.

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the Former Hough Place Station Site present an imminent and substantial threat to the public health, or welfare, and the environment, and meet the criteria for a removal action provided for in the National Contingency Plan (NCP), Section 300.415, Paragraph (b)(2). 40 C.F.R. § 300.415(b)(2)(i), (iii), and (vi), respectively, specifically allows removal actions for:

Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substance or pollutants or contaminants.

The samples results were above the TACAO Tier 1 for BETX, PAHs and total lead. Due to the levels of contaminant found onsite and the proximity of the site to nearby commercial and industrial properties, and the planned future use of the Site, there is potential exposure to soil ingestion routes for residential/commercial and construction worker receptors. The regulatory limit for lead in an residential/commercial worker setting is 400 milligrams per kilogram (mg/kg). The levels detected in the samples that were analyzed by an acredited laboratory ranged from 500 mg/kg to 3,290 mg/kg

High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate.

During SI field activities, soil impacts were observed to varying degrees in samples obtained from the Site. Compounds that exceeded Total Compound List (TCL) SVOC screening levels were PAHs. The benzo(a)pyrene screening level of 0.8 mg/kg was exceeded with concentrations ranging from 0.9 mg/kg to 220 mg/kg. The dibenzo(a,h)anthracene screening level of 0.8 mg/kg was exceeded with concentrations ranging from 0.9 mg/kg to 33 mg/kg. The benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene screening levels were exceeded as well. During SI field activities, source material was identified in five areas at the Site. The five source material areas identified include:

- The area near the 5,000 cf gas holder, former high pressure Pintsch gas holder, and former retorts in the southwestern portion of the Site
- The area near the suspect UST tanks and former dispenser pumps in the west central portion of the Site
- The area near the former 50,000 cf gas holder in the west central portion of the Site
- The area near the former tar wells and tar tanks in the north central portion of the Site

- The area near the former asphalt operations in the northwestern portions of the Site.

Actual or potential contamination of drinking water supplies or sensitive ecosystems.

Major surface water bodies in the immediate vicinity of the Site include the Chicago River immediately to the north of the Property. Shallow groundwater was encountered at the Site at depths between 3 to 11 feet below ground surface (bgs). Soil borings advanced beyond the eastern Site boundary indicated that tar was present at depths below the water level. BTEX, PAHs, metals and cyanide were detected in several surface and subsurface soil samples at the Site. These same compounds were detected in groundwater samples collected at the site in 2000. Several borings were advanced into river sediments. Impacts in the form of sheens, odor, tar globules, tar-coated or stained material, and traces of tar were observed in some of the sediment borings.

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.

Shallow soil samples indicate high levels of lead at surface level, which could migrate off the property. Migration could occur as a result of wind action during dry periods, which could pose a breathing hazard. Such wind action could also lead to deposition of materials in uncontaminated areas.

IV. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the suspected hazardous substances on Site, and potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Action Memorandum, present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

The OSC proposes to undertake the following actions to mitigate threats posed by the presence of hazardous substances at the Former Hough Place Station Site:

1) implement the existing Site Health and Safety plan used under the Illinois Site Remediation Program, including an air monitoring plan and Site contingency plan;

2) Develop and implement a Site security plan;

3) Characterize, remove, and properly dispose of hazardous substances and wastes and all soil pursuant to the plans under the Illinois Site Remediation Program;

4) Backfill excavated areas with clean material.

The OSC has planned for the provision of post-removal Site control consistent with the provisions of Section 300.415(l) of the NCP. It is anticipated that any post-removal Site control will be undertaken by PRPs.

The activities described in this memorandum will require an estimated 12 months to complete. It is anticipated that this removal will be completed by the PRP pursuant an AOC.

The response actions described in this memorandum directly address the actual or threatened release at the Site of a hazardous substance, or of a pollutant, or of a contaminant which may pose an imminent and substantial endangerment to public health or welfare or to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

All hazardous substances, pollutants or contaminants removed off Site pursuant to this removal action for treatment, storage, and disposal will be treated, stored, or disposed of at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 CFR § 300.440.

Applicable or Relevant and Appropriate Requirements

All Federal and State applicable, relevant, and appropriate requirements (ARARs) will be complied with to the extent practicable.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Continued risk to public health and the environment will result if no action or delayed action ensues.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this Site

is contained in the Enforcement Confidential Addendum (Attachment 3).

IX. RECOMMENDATION

This decision document represents the selected removal action for the Former Hough Place Station Site developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended, and is not inconsistent with the NCP. This decision was based upon information now presented in the Administrative Record for the Site. Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a removal and I recommend your approval of the removal action.

APPROVE: Richard C Karl DATE: 6-5-07
Director, Superfund Division

DISAPPROVE: _____ DATE: _____

Director, Superfund Division

Attachments

1. Administrative Record Index
2. EJ Analysis
3. Enforcement Addendum

cc: D. Chung, U.S. EPA, 5202-G
M. Chezik, U.S. Department of the Interior, **w/o Enf. Addendum**
B. Everetts, Illinois EPA, **w/o Enf. Addendum**
S. Davis, Illinois DNR, **w/o Enf. Addendum**

ATTACHMENT 1

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

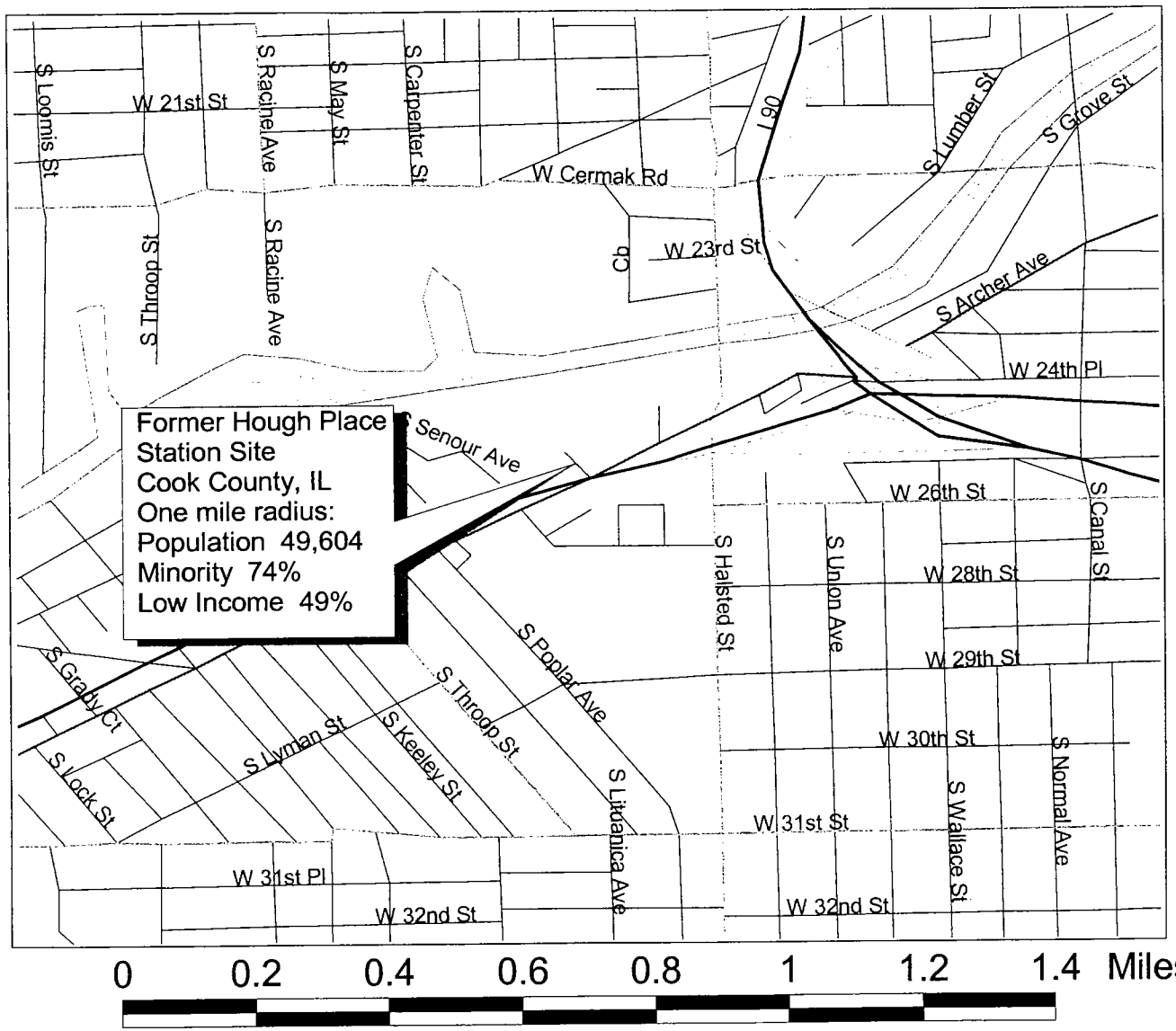
ADMINISTRATIVE RECORD
FOR
FORMER HOUGH PLACE STATION SITE
CHICAGO, COOK COUNTY, ILLINOIS

ORIGINAL
MAY 1, 2007

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	00/00/00	Cook, T., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Determination of Threat to Public Health or Welfare at Former Hough Place Station Site **(PENDING)**	

Region 5 Superfund EJ Analysis

Former Hough Place Station Site Chicago, IL



State of Illinois averages:
Minority: 32%
Low Income: 27%

U.S. EPA Region 5
Environmental Justice Case Criteria
for State of Illinois

Minority: 64% or greater

Low Income: 54% or greater

Date of Map: 4/25/07

Source of Map: Census 2000 Database/
ArcView 3.0

ENFORCEMENT ADDENDUM

PEOPLES GAS SITE
(FORMER HOUGH PLACE STATION SITE)
CHICAGO, ILLINOIS
MAY 2007

(REDACTED 1 PAGE)

ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY
FOIA EXEMPT